

Docket No. AUS920030462US1

ABSTRACT OF THE DISCLOSURE

TEMPERATURE AND CONDENSATION CONTROL SYSTEM FOR FUNCTIONAL TESTER

An innovative chip testing system and method includes controlling temperature and condensation during testing. Coarse temperature is controlled by providing a desired fluid flow rate and fluid temperature to a cold plate. Fine temperature control is provided by a feedback loop which controls the power dissipation of cartridge heaters installed within the cold plate. Condensation control is provided by insulating various components of the system, manipulation of dry compressed air in enclosures to reduce surface dew point temperatures, usage of cartridge heaters in a card backside stiffener plate, and by providing a heatsink assembly which prevents condensation on the insulation.